REMARKS

The Office Action dated September 8, 2005 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto. Claims 1-29 are currently pending in the application. However, claims 16-29 have been withdrawn from consideration pursuant to a restriction requirement. Claims 13-15 have been allowed. Therefore, claims 1-12 are respectfully submitted for consideration.

Claims 1-3 and 8-11 were rejected under 35 U.S.C. 102(b) as being anticipated by Onishi (U.S. Patent No. 5,434,863). The rejection is respectfully traversed for the reasons which follow.

Claim 1, upon which claims 2-12 are dependent, recites a network switch for network communications. The network switch includes at least one first data port interface, the at least one first data port interface supporting a plurality of first data ports transmitting and receiving data at a first data rate. The network switch further includes at least one second data port interface, the at least one second data port interface supporting a plurality of second data ports transmitting and receiving data at a second data rate. The network switch also includes a flow control unit, wherein at least one of the first data ports and at least one of the second data ports are linked together with a plurality of ports on a second network switch forming a trunk group with a larger load capacity than either of said at least one of the first data ports and the at least one of the second data ports, the

trunk group being configured by the flow control unit to statistically distribute a data load transmitted across the trunk group.

The present invention is concerned, in part, with trunking in a network switch. Trunking involves logically treating several links or connections between two devices as a single link. One embodiment of the present invention is illustrated in Fig. 20 where multiple ports are tied together so that a logical link would have a greater capacity than any one port on the network switch.

As will be discussed below, Onishi fails to disclose or suggest all of the elements of the claims, and therefore fails to provide the advantages discussed above.

Onishi discloses an internetworking apparatus for connecting plural network systems and a communication network system composed of plural network systems mutually connected. More specifically, Onishi discloses that a router manager and a plurality of routing accelerator modules for performing routing are connected to one another through a high speed bus, and a plurality of communication ports are connected to the respective routing accelerators. The plurality of routing accelerators can perform the routing for the reception of a data packet at high speed.

Applicants respectfully submit that Onishi fails to disclose or suggest that first data ports and second data ports are linked together with ports **on a second network switch** forming a trunk group with a larger load capacity, as recited in present claim 1. Onishi only discloses that the communication ports 51-56 are connected to a bus 4, which in turn is connected to a routing accelerator 3 (Onishi, Figure 1). Onishi does not

disclose or suggest that first and second data ports are connected to ports on a second network switch thereby forming a trunk group. The bus 4 of Onishi merely connects ports with the routing accelerator 3 within a single network device. Onishi does not disclose or suggest that the bus connects the ports of different network devices. In the response to arguments section of the Office Action, it is asserted that figure 2 discloses connecting first and second ports with ports on a second network switch forming a trunk group (Office Action, page 7, lines 3-7). Applicants note, however, that a bus is not provided in figure 2 to connect ports in different network devices. As such, Applicants respectfully assert that Onishi fails to disclose or suggest forming a trunk group between ports on different network switches.

Furthermore, Applicants respectfully submit that Onishi does not disclose or suggest forming a trunk group with a larger load capacity, as recited in claim 1. A trunk group, according to the claimed invention, is where multiple ports are combined to form a single logical port with a larger load capacity (See Specification, figures 19 and 20). For example, if traffic between a first switch and a second switch is anticipated as being high, the LAN may be configured such that a plurality of ports, for instance ports 1 and 2, can be connected together. In a 100 megabits per second environment, the trunking of two ports effectively provides an increased bandwidth of 200 megabits per second between the two ports (Specification, page 40, lines 9-16).

The Office Action took the position that the bus disclosed in Onishi is equivalent to the trunk group recited in the pending claims. Applicants respectfully assert that the

bus of Onishi does not correspond to the trunk group of the present invention because the bus does not link together first and second data ports with a plurality of ports on a second network switch thereby providing a larger load capacity. Onishi teaches that a bus is a connection means with a fixed throughput of, for example, 200 M bytes/second (Onishi, Column 7, lines 1-3). Onishi does not disclose or suggest that the bus links together ports on different network switches in order to provide a larger load capacity, as recited in present claim 1. According to Onishi, the bus has a fixed throughput and therefore the load capacity is not increased in any manner. Therefore, Onishi cannot disclose forming a trunk group with a larger load capacity. Onishi is concerned with providing routing at a high speed and does not provide for increasing load capacity between network switches. For at least the reasons discussed above, Applicants respectfully submit that Onishi fails to disclose or suggest all of the elements of claim 1.

Given the deficiencies of Onishi discussed above, applicants respectfully submit that the rejection of claim 1 as being anticipated by Onishi is improper for failing to disclose all of the elements of claim 1. Further, applicants respectfully submit that claims 2-12, which are dependent upon claim 1, should also be allowed for at least their dependence upon claim 1 and for the specific limitations recited therein.

Claims 1-4 and 6-12 were rejected under 35 U.S.C. 102(e) as being anticipated by Haddock (U.S. Patent No. 6,104,700). The rejection is respectfully traversed for the following reasons.

The subject matter of claim 1, and claims dependent thereupon, is discussed above. Haddock discloses a policy based quality of service. Haddock further discloses a method for managing bandwidth allocation in a network that employs a non-deterministic access protocol, such as an Ethernet network. A packet forwarding device receives information indicative of a set of traffic groups, if the QoS policy is based upon individual station applications; or a physical port if the QoS policy is based purely upon topology. After receiving a packet associated with one of the traffic groups on a first port, the packet forwarding device schedules the packet for transmission from a second port based upon bandwidth parameters corresponding to the traffic group with which the packet is associated.

Applicants respectfully assert that Haddock also fails to disclose or suggest that "at least one of said first data ports and at least one of said second data ports are linked together with a plurality of ports on a second network switch forming a trunk group with a larger load capacity than either of said at least one of said first data ports and said at least one of said second data ports, said trunk group being configured by the flow control unit to statistically distribute a data load transmitted across said trunk group," as recited in present claim 1.

Applicants respectfully submit that Haddock, like Onishi, clearly fails to disclose or suggest that first and second data ports are linked together with a plurality of ports **on a second network switch** thereby forming a trunk group with a larger load capacity. Haddock only discloses that a switch matrix 115 is used to connect channels 105, 110

with a RAM 125 within a single network switch 100. Haddock is not concerned with connecting a first and second port with a plurality of ports on a second network switch in order to form a trunk group. Rather, Haddock is concerned with packet processing within a single network switch. The present invention, on the other hand, provides, in part, that the ports of two network switches are linked together to form a trunk group which acts as a single logical port (Specification, page 40, lines 16-24 and Figs. 19 and 20). Haddock, however, fails to disclose or suggest linking together the ports of two network switches. Therefore, Haddock fails to disclose or suggest at least this element of claim 1.

Moreover, Applicants respectfully submit that the switch matrix of Haddock does not correspond to the trunk group of the present invention, which provides a larger load capacity. As discussed above, a trunk group is formed between ports of different network switches which is not disclosed by Haddock. In addition, Haddock does not disclose that the switch matrix provides a larger load capacity than either of the data ports. In the response to the arguments section of the Office Action, it is asserted that the switch matrix accommodates an octal fast Ethernet interface and a gigabit fast Ethernet interface, and therefore has a larger capacity than either interface individually (Office Action, page 10, lines 10-15). Applicants respectfully disagree. Haddock only discloses that the switch matrix can support these channels individually, not simultaneously. Therefore, it would appear that the load capacity of the Haddock switch matrix only corresponds to that of the channel with the highest data transfer rate. As such, Haddock does not disclose or suggest a trunk group with a larger load capacity.

Applicants respectfully assert that the rejection of claim 1 is improper as Haddock fails to teach all of the elements of claim 1. Furthermore, applicants respectfully submit that claims 2-12, which depend upon claim 1, should be allowed for at least their dependence upon claim 1 and for the specific limitations recited therein.

Claim 5 was rejected under 35 U.S.C. 103(a) as being unpatentable over Onishi. The rejection is respectfully traversed for the reasons which follow.

Claim 5 is dependent upon claim 1. The Office Action acknowledged that Onishi does not teach the placement of the first data port interface, second data port interface, CPU interface and communication channel on a single chip, as recited in claim 5. The Office Action then took the position that "a person of ordinary skill in the art would have been motivated to integrate these components onto a single chip by the constant desire for smaller integrated electronic devices." However, as stated above, Onishi does not disclose or suggest the use of a trunk group as recited in claim 1. Therefore, it would not have been obvious to one of skill in the art to integrate the components onto a single chip that included the trunk group element. Additionally, claim 5 is dependent upon claim 1 and therefore should be allowable for at least its dependence upon claim 1 and for the specific limitations recited therein.

Claim 5 was also rejected under 35 U.S.C. 103(a) as being unpatentable over Haddock. The rejection is respectfully traversed for the reasons which follow.

The Office Action acknowledged that Haddock does not teach the placement of the first data port interface, second data port interface, CPU interface and communication

channel on a single chip. The Office Action then took the position that "a person of ordinary skill in the art would have been motivated to integrate these components onto a single chip by the constant desire for smaller integrated electronic devices." However, as discussed above, Haddock fails to disclose or suggest the use of a trunk group as recited in claim 1. Therefore, it would not have been obvious to one of skill in the art to integrate the components onto a single chip that included the trunk group element. Moreover, applicants submit that claim 5 is dependent upon claim 1 and therefore should be allowable for at least its dependence upon claim 1.

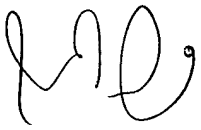
Applicants respectfully submit that the rejections of claim 5 are improper as the cited references fail to disclose or suggest all of the elements of claim 5. Therefore, Applicants respectfully request that rejections of claim 5 be withdrawn.

For at least the reasons discussed above, Applicants respectfully submit that Onishi and Haddock fail to disclose or suggest critical and important elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-15 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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